Date: User: Monday, 02/06/2008 1:54:23 PM

Julie Lecocq

#### **Process Sheet**

Customer

: CU-DAR001 Dart Helicopters Services

Job Number

: 39644

P.O. Number

: 10923 **Estimate Number** 

This Issue Prsht Rev.

First Issue

**Previous Run** 

: 02/06/2008

: NC

: 17 : 37325

S.O. No. :

Type

: SMALL /MED FAB

**Part Number** 

**Drawing Name** 

: D2003043 · UNDER-REVIEW

: TUBE ASSEMBLY

**Drawing Number Project Number** 

: N/A : B

**Drawing Revision** 

SEE STEP 9.0

Material

**Due Date** : 03/06/2008

5 Um:

Each

Checked & Approved By

Comment

Written By

B 00.01.12 Re-format EC

**Additional Product** 

Job Number:



Seq. #:

**Machine Or Operation:** 

Description:

DC

**DOCUMENT CONTROL** 

304 RD Tube .500 x .035W

Comment: DOCUMENT CONTROL

type labels per PPP D2003-043

8,6,13

2.0

1.0

0.9406 f(s)/Unit Total: 4.7030 f(s)

Material:1/2"Æ x 0.035" wall AISI 304 SS tubing

Batch: M 108215

08-06-12

5

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

1-Form tube as per template D2003-043

4.0

QC5

Comment: Qty.:

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

5.0

M26506

Firesleeve-crkl .375IDia



Comment: Qty.:

1.0238 f(s)/Unit Total:

5.1188 f(s)



Material: M2650-6 Heat sleeve

08-06-12

6.0

MS208198J

Comment: Qty.:

2.0000 Each(s)/Unit Total: 10.0000 Each(s)

Pick:

**Qty Part Number** 2 MS20819-8J

FF 08-06.12

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES									
DATE	STEP	PROCEDURE CHANGE	ÿ.	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector			
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Part No: _	- Carly Carly	PAR #:	Fault Category:	 NCR: Yes	No	DQA:	Date: _	
				QA: N	I/C C	losed:	Date:	

NCR:		WORK ORDER NON-CONFORMANCE (NCR)										
		Description of NC		Corrective Action Section B		Verification	Approval	Approval				
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspector				
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Monday, 02/06/2008 1:54:23 PM Date: Julie Lecocq User: → **Process Sheet Drawing Name: TUBE ASSEMBLY** Customer: CU-DAR001 Dart Helicopters Services Job Number: 39644 Part Number: D2003043 Job Number: Seq. #: Description: **Machine Or Operation:** AN8188J Nut 7.0 Comment: Qty.: 2.0000 Each(s)/Unit Total: 10.0000 Each(s) Pick: Description **Qty Part Number** 2 AN818-8J FF 00-06-12 8.0 D2182 Heat Shrink Comment: Qty.: 0.3750 f(s)/Unit Total: 1.8750 f(s) Pick: **Qty Part Number** Description Batch FF 00-08-12 1 D2182-045 Heat shrink SMALL FAB 1 MALL & MEDIUM FAB RESOURCE 1 Comment: SMALL & MEDIUM FAB RESOURCE 1 CONFIRM 1-Cut as per template D2003-043 (10.75" long) OF TUBING 2-Cut: 11.7" long as per Dwg D2003 B.08.06.02 3-Assemble as per Dwg D2003 08-06-13 10.0 QC5 INSPECT WORK TO CURRENT STEP Comment: INSPECT WORK TO CURRENT STEP 11.0 PACKAGING 1 PACKAGING RESOURCE #1 Comment: PACKAGING RESOURCE #1 Identify and Stock Location:\_\_\_ 12.0 QC21 FINAL INSPECTION/W/O RELEASE 08/06/16/ Comment: FINAL INSPECTION/W/O RELEASE Job Completion N 38-06-13

Page 2

Form: rprocess

## **Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES										
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector					

Part No:	PAR #:	_ Fault Category:	NCR: Yes	No DQA:	Date:	
			QA: N/	C Closed:	Date:	

NCR:			WORK ORDER NON-CONFORMANCE (NCR)										
-		Description of NC		Corrective Action Section B	Verification	Approval	Approval						
DATE	STEP	Section A	Initial Chief Eng			Section C	Chief Eng	QC Inspector					
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	DESIG	9	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
	CHEC	<b>SP</b>	APPROVED	DRAWING NO. REV. B
	4	15		D2003 SHEET 1 OF 2
	DATE	,		TITLE SCALE
_	99.0	6.08		206 CABIN HEATER TUBE ASSEMBLIES NTS
	Α		90.04.09	NEW ISSUE
	В		99.06.08	UPDATE PER TEMPLATES; ADD P/N'S; 0.025 TUBING NOW 0.035 (TSR1049)

RELEASED 49.06.03 KE

UNDER REVIEW

COS-21 CB From wrong

1506.00.02

						-						
P/N	TEMPLATE	HEATSLEEVE LENGTH <sup>1</sup>	CUT LENGTH OF TUBE <sup>2</sup>	MS20819-8J SLEEVE	AN818-8J NUT	MS20819-8D SLEEVE	AN818-8D NUT	MS20819-6D SLEEVE	AN818-6D NUT	DESC.	MATERIAL <sup>4/8/7</sup>	VENDOR OR SPEC
D2003-001	T2003-001	5.2	6.00					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-003	T2003-003	7.3	8.12					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-005	T2003-005	9.8	10.62					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-007	T2003-007	20.0	19.63					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-009	T2003-009	12,38	12.44					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-011	T2003-011	33,31	32.38					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0,035 W	WW-T-700/6
D2003-013	T2003-013	12.7	13,54					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-015	T2003-015	17.2	18.00					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-017	T2003-017	17.0	16.25					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-019	T2003-019	9.8	10.62			2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6
D2003-021	T2003-021	N/A	2.25			2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6
D2003-023	T2003-023	4.5	5,33			2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6
D2003-025	T2003-025	9.8	10.60			2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6
D2003-027	T2003-027	7.25	7.38			2	2			TUBE ASS'Y	6061-T6 0,500 OD x 0,035 W	WW-T-700/6
D2003-029	T2003-029	17.2	18.00			2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6
02003-031	T2003-031	14.6	15.38	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-033	T2003-033	29.75	29.62	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-035	T2003-035	24.7	27.00	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-037	T2003-037	24.81	23.38	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-039	T2003-039	34.0	34.00	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-041	T2003-041	6.0	5.88	2	2	$\top$				TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-043	T2003-043	11.7	10.75	2	2		04.0	ک-ی	5	TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-045	T2003-045	3.50	2.44	2	2			(O-1		TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-047	T2003-047	5.56	5.56	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-049	T2003-049	33.2	34,00	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-077	T2003-077	N/A	6.25					1	1	JET	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-101	T2003-101	13.25	13.13					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-600/6
D2003-103	T2003-103	12.38	12.00					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-600/6
D2003-105	T2003-105	10.75	10.60					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-600/6
D2003-107	T2003-107	12.75	12.25					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-600/6
D2003-109	T2003-109	8,25	8.125			2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-600/6
D2003-111	T2003-111	4.75	4.625			2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-600/6
D2003-116	T2003-116	4.0								HEATSLEEVE	M2650-20 CRINKLE-SOFT	STRATOFLEX
D2003-120	T2003-120	4.0								HEATSLEEVE	M2650-16 CRINKLE-SOFT	STRATOFLEX
D2003-14	T2003-14	4.0				-				HEATSLEEVE	M2650-14 CRINKLE-SOFT	STRATOFLEX
D2003-16	T2003-16	4.0								HEATSLEEVE	M2650-16 CRINKLE-SOFTS	
D2003-205	T2003-205	9.75	9.60					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W p	
D2003-207	T2003-207	3.75	3.75					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W.,	GINEERING
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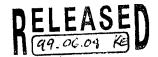
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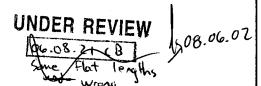
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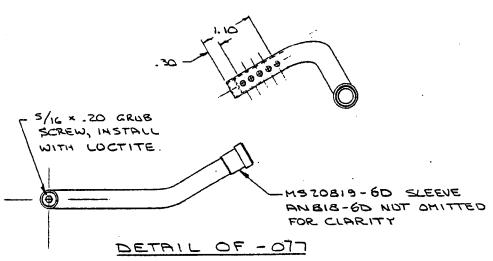
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CHECKED	APPROVED	DRAWING NO.	REV. B
#	14	D2003	SHEET 2 OF 2
DATE		TITLE	SCALE
99.06.08		206 CABIN HEATER	TUBE ASSEMBLIES NTS





#### Notes:

- (1) USE STRATOFLEX M2650-6 CRINKLE-SOFT HEATSLEEVE.
- (2) TUBING ASSEMBLIES TO BE CUT AND BENT IN ACCORDANCE WITH TEMPLATES.
- (3) TUBES TO BE FLARED 30° TO MATE WITH FITTINGS MADE TO MS33514.
- (4) ENSURE SEAMLESS TUBING IS USED.
- (5) INSTALL HEATSLEEVE OVER ALL TUBES WITH A DESIGNATED LENGTH OF HEATSLEEVE PER THE PARTS LIST.
- (6) 5052 (WW-T-700/4) TUBING MAY BE SUBSTITUTED WHEN 6061 TUBING IS NOT AVAILABLE.
- (7) 0.049 WALL THICKNESS CRES TUBING MAY BE SUBSTITUTED WHEN 0.035 IS NOT AVAILABLE.
- (8) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.



### **Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES											
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector						
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	<b>Description of NC</b> Section A	Corrective Action Section B			Verification	Approval	Approval
			Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspector
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